

even be made that cultural dissonance occasionally serves a positive function in providing a wide range of possible role models during those latent periods in which evaluation and experimentation are most important. Negative relationships would thus be viewed more in the light of immediate decision making at a time of relatively acute conflict. The mechanisms by which such decisions are made, and their relationship to personality growth and integration, remain a relevant area of concern for the behavioral scientist.

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### HYPNOTIST AND MANNER OF PRESENTATION EFFECTS ON A STANDARDIZED HYPNOTIC SUSCEPTIBILITY TEST

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Administration of standardized hypnotic susceptibility tests requires, among others, 2 basic assumptions, i.e., (a) administration of the test by different hypnotists has no significant effect on Ss' performances, and (b) administration of the test by way of different presentation methods has no significant effect on Ss' performances. 4 groups of 55 Ss each were administered the Harvard Group Scale of Hypnotic Susceptibility under 4 experimental conditions, i.e., 1 of 2 (quite different) hypnotists, who either presented the scale in person or presented the scale by way of prerecorded tape. Results tend to weaken the tenability of the aforementioned basic assumptions.

Recently, several new standardized procedures for measuring hypnotic susceptibility have been made available to the practitioner and researcher. These tests provide, in most cases, verbatim hypnotic induction and testing instructions. The present study investigated two important assumptions that most susceptibility tests appear to share in common. The first is the assumption that for any given S, if a given induction procedure is presented under relatively standard conditions, the S's susceptibility score will not be affected when the test is administered by different hypnotists. That is, differences in hypnotists' age, status, sex, poise, voice characteristics,

etc., are not important influences upon S responses to standardized induction procedures. The second common assumption is that a tape recording of the standardized induction procedure is virtually equivalent in its effect on S performance as is the typical standardized induction procedure administered in person by the hypnotist. That is, recorded or spoken, the results of the induction procedure will be the same.

Levitt and Overley (1965) provided some support for the first assumption. They investigated the effects of hypnotist experience on Ss' hypnotic behavior, and they concluded that it "is likely to be irrelevant to S performance in the stan-

TABLE 1  
GROUP HGSHS MEANS

Group	<i>M</i>
$E_1$ spoken	7.36
$E_1$ tape	6.52
$E_2$ spoken	6.00
$E_2$ tape	6.21

dardized research situation [p. 34]." Further partial support was offered by Cabidi, Hughes, and Butler (1965), whose study demonstrated that even the changing of hypnotist in the middle of an induction procedure has no significant effect on *S* response. On the other hand, Wolberg (1964) and other current authorities in the field of hypnosis (e.g., Hilgard, 1965; Kroger, 1963; Weitzenhoffer, 1957) have stressed that such factors as training, experience, sensitivity, status, self-confidence, and other personality characteristics of the hypnotist are critical with regard to induction efficiency. For instance, Barber and Calverley (1964b) have shown that differences in *E* "tone of voice" (i.e., "forceful" or "lackadaisical") produce significant differences in *S* responding. Remmers (1940) reported that the sex of the hypnotist also affects performance with children. Elsewhere, Barber (1964) reviews the results of several other investigations which indicate that personal factors of the hypnotist do affect *S*'s hypnotic behavior.

In relation to the second assumption, many workers in the field suggest tape-recorded over spoken presentation procedures in order to provide an additional experimental control. Barber and Calverley (1964a, 1966a, 1966b), Shor and Orne (1962), and Hoskovec, Svorad, and Lanc (1963) all report that the effects of tape-recorded induction procedures are equivalent to the effects of personally spoken induction procedures.

#### METHOD

Four groups of 55 *Ss* each were administered the *Harvard Group Scale of Hypnotic Susceptibility* (HGSHS; Shor & Orne, 1962) under four different conditions. The *Ss* were University of Utah psychology students, mostly from introductory psychology classes. There were 111 males and 109 females ranging in age from 17 to 57; the mean age for all *Ss* was 22.6 years. All *Ss* were paid \$1.00 or one experimental point for participation. Because of the restricted range within the experimental population (paid university-student volunteers) there were no additional controls for such factors as age, sex, or intelligence, since (within this range) these factors

are not considered significant in their influence on hypnotic potentiality or behavior (Das, 1961; Deckert & West, 1963; Kroger, 1963).

The situations under which the HGSHS was administered to the four groups were not identical, but were within expected or suggested limitations. The HGSHS was separately administered to the four groups of *Ss* by two hypnotists ( $E_1$  and  $E_2$ ), using two methods of presentation (i.e., spoken or tape-recorded procedures).  $E_1$  was a male graduate psychology student, with no exceptional voice characteristics, and having had only limited experience and training in hypnosis. In contrast,  $E_2$  was a male professor of psychology, who spoke with a genuine German accent, and who has had a great deal of experience and training in hypnosis. Though not identical, the tape-recorded presentation of the two *Es* appeared to be quite similar to their spoken presentations.

#### RESULTS AND DISCUSSION

The data of the present study consisted of a single score (ranging from 0 to 12) on the HGSHS for each of 220 *Ss*. Group means are presented in Table 1. The 220 scores were analyzed in terms of a  $2 \times 2$  completely randomized analysis of variance (Li, 1959). The results of the analysis of variance are presented in Table 2.

Results of the analysis of variance show that in administrating the HGSHS, the two hypnotists differentially affected ( $p < .05$ ) the scores of the *Ss* in the four groups. Further, there was no difference in effects on scores when the HGSHS was administered by way of spoken or tape-recorded presentation methods. On the other hand, results indicate that there was a significant interaction ( $p < .05$ ) on HGSHS scores between the two hypnotists and the two presentation methods.

Results from the present study tend to weaken the tenability of the two important assumptions shared by most standardized tests of hypnotic susceptibility. Specifically, we cannot assume that scores on the HGSHS administered by one *E* are equivalent to scores on the HGSHS administered by another *E*. Similarly, we cannot

TABLE 2  
ANALYSIS OF VARIANCE OF HGSHS SCORES

Source	<i>df</i>	<i>MS</i>	<i>F</i>
Hypnotist	1	36.30	4.30*
Presentation method	1	5.50	.65
Interaction	1	50.60	5.99*
Within	216	8.44	
Total	219		

\*  $p < .05$ .

assume that scores on the HGSHS are equivalent across hypnotists (*Es*) using different methods of presentation.

There are two important weaknesses in the design of the present study, which appear to restrict the generalizability of its results. First, only two *Es* were used, and, so as to accentuate any effects due to differences in personal characteristics, these two *Es* were selected primarily on the apparent divergence in several of their personal characteristics. However, it is possible that most individuals that administer hypnotic susceptibility tests do not differ so dramatically in these characteristics as did the two *Es* of the present study. Second, factors associated with the composition of the four groups of *Ss* used in the present study may have caused (unintentional) systematic effects on the criterion scores; that is, these uncontrolled factors may have introduced what Lindquist (1953, pp. 9-10) calls Type G Errors. In addition to considering these design limitations, our results may reflect the influence of only one factor or the influence of a combination of several factors. We can only ask, at this point, were our differences of effect a function of hypnotist voice characteristics (e.g., maturity, accent, clarity, etc.), past hypnotist experience, age of the hypnotist, prestige characteristics of the hypnotists, or other more subtle personality characteristics of the hypnotists?

If the results of the present preliminary study are reliable, one significant implication is that different hypnotists should be "calibrated" for different methods of presentation of the HGSHS. Otherwise, matching *Ss* used in hypnosis investigations on the basis of their measured susceptibility will be less meaningful than presently assumed. We hope that our results, though obviously not conclusive, will call to question some of the assumptions underlying most, if not all, standardized susceptibility tests, at least until additional supportive evidence is reported.

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